Luxury vinyl plank (LVP) can hold a 500-pound rolling load if you choose a thick, rigid core product (at least 5mm to 8mm thick) with a heavy wear layer (20 mil or higher) and glue it down completely to the cement subfloor. Floating LVP will crack, separate, or break the click-locks under that much rolling weight.

Weight Limits and Glue-Down Setup

- LVP flexes under pressure.
- Floating floors bend and break.
- Glue stops the planks from moving.
- Concrete must be flat and dry.

Choosing the Right Materials

- **Thickness:** Pick planks at least 6mm to 8mm thick.
- **Core Type:** Use WPC (wood plastic composite) or SPC (stone plastic composite). SPC is harder and resists dents better.
- **Wear Layer:** Get a 20 mil or 30 mil wear layer.
- **Installation:** Spread full-spread adhesive on the concrete. Do not use peel-and-stick or floating styles.

Protecting Your Floor

- **Casters:** Use wide, soft rubber or polyurethane wheels.
- **Avoid:** Hard plastic or small metal wheels cause deep gouges.
- **Weight Distribution:** Spread the 500 pounds over a larger area if you can.